

Notice of Allowability

Application No.

10/540,170

Examiner

Charles Chow

Applicant(s)

CHAI ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/4/2006.
2. ☒ The allowed claim(s) is/are 1 and 3-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

Detailed Action

1. This office action is for amendment dated 11/22/2006.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

Claims 1, 3-13 are allowable over the prior art of record. The prior arts fail to teach the allowable features, singly, particularly, or in combination.

Applicant has canceled claim 2, & amended claim 1 with objected features from claim 2, the drawer type SIM card plug & receptacle 14 wherein a socket 9 inserted with the drawer type SIM card plug and receptacle 14 set in a side face of the housing.

Claims 8, 10 were objected in the previous office action, & now they are amended to be the independent claims.

The independent **claim 1** is allowable for the features for a pen type mobile telephone having display, button, telephone receiver, earphone, the said housing has a shape of slender rod form, **said printed circuit board PCB 11 uses more than 6 layer PCB** with a width smaller than the width of the housing; said circuit part 12, 13, is mainly divided into radio frequency module 12 and fundamental frequency module 13; together with

the drawer type SIM card plug & receptacle 14 wherein a socket 9 inserted with the drawer type SIM card plug and receptacle 14 set in a side face of the housing.

The independent **claims 8** is allowable for the features, **said printed circuit board PCB (11) uses more than 6 layer PCB** with a width smaller than the width of the housing **and multiple-in-one socket 16** is installed at said PCB 11; together with the features from claim 1, except the drawer type SIM card plug and receptacle.

The independent **claim 10** is allowable for the features, wherein at the **PCB 11 a laser** is provided **at a position corresponding to a laser exit 8** at the bottom of the housing; **said**

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PCB uses more than 6 layer PCB with a width smaller than the width of the housing; together with the features from claim 1, except the drawer type SIM card plug and receptacle.

The Independent **claim 13** is allowable for the features, **wherein said button** includes digit keys and function keys **in oblique arrangement with 30-60 degrees; the said printed circuit board uses more than 6 layer printed circuit board** with a width smaller than the width of the housing; together with the features from claim 1, except the drawer type SIM card plug and receptacle.

The dependent claims are also allowable due to their dependency upon their independent claim and comprising additional claimed features associated to the features of the independent claims.

The closest prior art **Hess et al. [US 2002/0065,104 A1]** teaches a mobile radio telephone 1 [Fig. 3] having pen shaped exterior with display 5, button 9, telephone receiver 32, circuit 3, optical transmitter 65, not laser on 6 layer PCB [Fig. 6], but fails to teach the earphone; drawer type SIM plug and receptacle set in a side face of the housing; the PCB uses more than 6 layer PCB; the multiple-in-one socket; the at PCB a laser is provided at a position corresponding to a laser exit 8; the oblique arrangement of the keys with angle of inclination between 30-60 degrees.

Liu et al. [US 6,671,497 B2] teaches the earphone for a pen type radio [13-15, Fig. 2, col. 2, lines 8-10 3& col. 2, lines 43-51], but fails to teach the other above allowable features missed by Hess.

Yamazaki et al. [US 2002/0140,076 A1] teaches the multi-layer circuit board [abstract, Fig. 3A-3B], the number of conductive layers can be suitable selected in the first laminate & in the second laminate, paragraph 0085-0085, with very thin conductive layer 80 to 250

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micro-meters [0070], but fails to teach the other above allowable features missed by Hess & Liu et al.

Callaghan et al. [US 6,058,304] teaches the card plug & receptacle in a handheld data entry unit with cellular telephony [Fig. 1A, 1B, Fig. 3, abstract] is capable of having socket or connector or smart card reader, for the data entry [col. 16, lines 64 to col. 17, line 7], optical transmitter 34, 64, not on the 6 layer PCB, but fails to teach the other above allowable features missed by Hess, Liu et al., & Yamazaki et al.

Other prior arts in below were also considered, but they fail to teach the above allowable features.

Liu [2005/0167,509 A1, Fig. 3]; Holz auf der Heide et al. [US 2004/0203,411 A1], Schiller et al. [US 6,577,299 B1], Biyle [US 6,901,245 B1, Fig. 1-2], Fujieda et al. [US 2002/0070,901 A1], Akihiko [US 2002/0162,687 A1], Hsu [US 2002/0158,135 A1], Jankowsky et al. [US 5,928,035], Huang [US 5,617,304], Metroka et al. [US 5,754,645], Ojima et al. [US 4,128,889], Dupraz et al. [US 2005/0024,346 A1], Ikeda et al. [US 2005/0088,349 A1], Ponce de Leon et al. [US 5,448,253], Montgomery [US 2004/0229,645 A1], Lapstun et al. [US 6,789,191 B1], Fujiwara [US 5,301,222], O'Connor et al. [US 6,188,392 B1].

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (571) 272-7889. The

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examiner can normally be reached on 8:00am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow *CC*

December 8, 2006.



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